

a touch layer disposed on said insulative layer, said touch layer having a conductivity selected to create an electrical image of a conductive object that is larger than a area of contact of said conductive object contacting said touch layer.

17. The touch pad system of claim 16, wherein said sensor layer differs in size from one of said insulative layer and said touch layer.

18. The touch pad system of claim 16, wherein said insulative layer differs in size from one of said touch layer and said sensor layer.

19. The touch pad system of claim 16, wherein said sensor layer differs in shape from one of said insulative layer and said touch layer.

20. The touch pad system of claim 16, wherein said insulative layer differs in shape from one of said touch layer and said sensor layer.

21. The touch pad system of claim 16 wherein said conductive object is contactable with said touch layer, said conductive object configured to contact said touch

layer forming said area of contact, said touch layer configured to spread out an electrical image responsive to said area of contact.

22. The touch pad system of claim 16, wherein said touch layer is configured to form a larger capacitive plate for coupling to said sensor layer when said touch layer is contacted by said conductive object.

23. The touch pad system of claim 21, wherein said electrical image is about the size of a finger.

24. The touch pad system of claim 16, wherein a resistance of said touch layer is configured to limit the size of said electrical image within the limits of said sensor layer, wherein said electrical image is formed by said conductive object contacting said touch layer.

25. The touch pad system of claim 16, wherein said touch layer is formed with a conductive material disposed in a plastic carrier.

26. The touch pad system of claim 25, wherein said conductive material comprises carbon powder.
27. The touch pad system of claim 16, wherein said insulative layer, said touch layer and said sensor layer are transparent.
28. The touch pad system of claim 27, further comprising:
a display in operative communication below said sensor layer.
29. The touch pad system of claim 28, wherein said display is configured to provide visual feedback to a user of the touch pad system.
30. The touch pad system of claim 16, wherein a user is in electrical communication with said conductive object.
31. The touch pad system of claim 16, wherein said conductive object comprises one of metal and conductive plastic, wherein said conductive object is electrically conductive.

32. The touch pad system of claim 16, wherein said conductive object includes a conductive tip, said conductive tip is selected from the group consisting of a wide stylus, a ball of conductive foam, and a circular metal plate with a ball joint.

33. The touch pad system of claim 16, wherein said conductive object comprises a fine tipped conductive pen.

Bl cont

34. The touch pad system of claim 16, further comprising:
a bezel disposed on said touch layer, wherein said bezel is configured to prevent edge distortion.

35. The touch pad system of claim 16, wherein the touch pad system is configured to compensate for edge distortion by calibration means.

36. The touch pad system of claim 35, wherein said calibration means comprises:

measurement of a stylus position at locations on said sensor layer;

tabulation of said measurements of said stylus position;

development of a mathematical function from said tabulation; and

calculation of a correction function from said mathematical function,
wherein said correction function can be applied to each of said measured stylus positions
during operation of the touch pad system.

37. A touch pad system comprising:

a sensor layer;

an insulative layer disposed on said sensor layer;

a conductive layer disposed on said insulative layer, said conductive layer

B1 cont. configured to expand a contact area of a conductive object contacting said conductive
layer; and

a means for distinguishing an identity of said object.

38. The touch pad of claim 37 wherein said means for distinguishing an
identity of said object comprises a means based on a size of said contact area.

39. The touch pad of claim 37 wherein said means for distinguishing an
identity of said conductive object comprises a means based on a fluctuating capacitance
signal, wherein said conductive object contacting said conductive layer includes a contact

area and said contact area is variable for a finger contacting said conductive layer and said contact area is substantially constant for a stylus contacting said conductive layer.

40. The touch pad of claim 37 wherein said means for distinguishing an identity of said conductive object comprises a means based on a strength of a capacitive signal, wherein a stylus produces an immediate full strength capacitive signal upon contacting said conductive layer and a finger produces a gradually increasing capacitive signal as said finger approaches contacting said conductive layer.

*B1
D. cont*
41. A touch pad system comprising:

a sensor layer;

an insulative layer disposed on said sensor layer, said insulative layer including a touch surface configured to produce a visual mark of a conductive object contacting said touch surface; and

a visual feedback to a user from said visual mark.

42. A touch pad system comprising:

a sensor layer;

an insulative layer disposed on said sensor layer;

a conductive layer disposed on said insulative layer, said conductive layer configured to produce a visual mark of a conductive object contacting said conductive layer; and

a visual feedback to a user from said visual mark.

43. The touch pad sensor of claim 42 wherein said visual mark is produced by mechanical contact of said conductive object with said conductive layer.

Bl Cont

44. The touch pad sensor of claim 42 wherein said visual mark is produced by chemical reaction resulting from contact of said conductive object with said conductive layer.

45. The touch pad sensor of claim 42 wherein said visual mark is an alteration in at least one of color and reflectivity produced by mechanical contact of said conductive object with said conductive layer.

46. The touch pad sensor of claim 42 wherein said visual mark is produced by a sacrificial material on a tip of said conductive object in response to mechanical contact of said conductive object with said conductive layer.

47. The touch pad sensor of claim 46 wherein said sacrificial material is pencil graphite.

48. The touch pad sensor of claim 42 wherein said visual mark is produced by a groove in a surface of said conductive layer in response to mechanical contact of said conductive object with said conductive layer, wherein said surface of said conductive layer comprises a pliant material.

Best 49. The touch pad sensor of claim 42 wherein said visual mark produced by mechanical contact of said conductive object with said conductive layer is removable.

50. The touch pad sensor of claim 42 wherein said visual mark is produced by a layer of liquid crystal material coupled to said conductive layer in response to mechanical contact of said conductive object with said conductive layer.

51. A touch pad system comprising:

a sensor layer;

an insulative layer disposed on said sensor layer; and

a touch layer disposed on said insulative layer, said touch layer configured

B1 cond. to diffuse an electrical signal a selected distance from a conductive object contacting said

touch layer.
